Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Project Division Yelahanka

Name of Work: Modified Estimate For Improvements to roads and drains in ward no.05 Surrounding area, Byatarayanapura sub division

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1,KPWD SR 2018-19) 8km lead= 57+2.0x1.28x8 =77.48								
	Oppo. Reva College								
	Road-1	2	115.65	1.10	1.00	254.43			
	OM Circle								
	1st Cross Rd	2	106.70	1.10	1.00	234.74			
	2nd Cross Rd	2	58.60	1.10	1.00	128.92			
	Connecting Road	2	62.50	1.10	1.00	137.50			
	CC Drain								
	Drain frm Kogilu Mn Rd To Lake	1	302.30	3.00	1.90	1723.11			
	Shivapura								
	2nd B Cross Road	1	136.60	1.10	1.00	150.26			
	Cross Road 01	1	67.30	1.10	1.00	74.03			
	Cross Road 02	1	32.10	1.10	1.00	35.31			
	Cross Road 03	1	57.50	1.10	1.00	63.25			
	Culvert	5	6.70	1.50	1.00	50.25			
	Desilt								
	3rd Cross Rd	2	109.00	0.40	0.35	30.52			
						2882.32	**Cum**	**348.60**	**1004776.75**
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	2	115.65	1.10	0.15	38.16			
	OM Circle								
	1st Cross Rd	2	106.70	1.10	0.15	35.21			
	2nd Cross Rd	2	58.60	1.10	0.15	19.34			
	Connecting Road	2	62.50	1.10	0.15	20.63			
	CC Drain								
	Drain frm Kogilu Mn Rd To Lake	1	302.30	3.00	0.15	136.04			
	Shivapura								
	2nd B Cross Road	1	136.60	1.10	0.15	22.54			
	Cross Road 01	1	67.30	1.10	0.15	11.10			
	Cross Road 02	1	32.10	1.10	0.15	5.30			
	Cross Road 03	1	57.50	1.10	0.15	9.49			
	Culvert	5	6.70	1.50	0.15	7.54			
	CC Road								

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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	)d frm Hajbhavan to Vidhana Soudha Layout	1	193.60	5.15	0.15	149.56			
						454.89	**Cum**		
		Upto 125%				**418.65**		**5478.00**	**2293364.70**
		Above 125%				**36.24**		**5478.00**	**198547.37**
3	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio (I No-28.8.2,P No-229,KPWD SR 2018-19)								
	Steel for drain					18129.33			
	Steel for Culvert					54625.06			
						72754.39			
						72.75	**Tn**	**71712.00**	**5217362.99**
4	Providing and laying **plain/reinforced cement concrete** for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271,KPWD SR 2018-19)								
	Raft								
	Oppo. Reva College								
	Road-1	2	115.65	0.90	0.15	31.23			
	OM Circle								
	1st Cross Rd	2	106.70	0.90	0.15	28.81			
	2nd Cross Rd	2	58.60	0.90	0.15	15.82			
	Connecting Road	2	62.50	0.90	0.15	16.88			
	Shivapura								
	2nd B Cross Road	1	136.60	0.90	0.15	18.44			
	Cross Road 01	1	67.30	0.90	0.15	9.09			
	Cross Road 02	1	32.10	0.90	0.15	4.33			
	Cross Road 03	1	57.50	0.90	0.15	7.76			
	Wall								
	Oppo. Reva College								
	Road-1	4	115.65	0.15	0.55	38.16			
	OM Circle								
	1st Cross Rd	4	106.70	0.15	0.55	35.21			
	2nd Cross Rd	4	58.60	0.15	0.60	21.10			
	Connecting Road	4	62.50	0.15	0.60	22.50			
	Shivapura								
	2nd B Cross Road	2	136.60	0.15	0.60	24.59			
	Cross Road 01	2	67.30	0.15	0.60	12.11			
	Cross Road 02	2	32.10	0.15	0.60	5.78			
	Cross Road 03	2	57.50	0.15	0.60	10.35			
						302.16			
	Drain frm Kogilu Mn Rd To Lake								
		1	302.30	2.20	0.20	133.01			
	Drain Top Slab	1	302.30	1.80	0.20	108.83			

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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Culvert	5	6.70	1.20	0.23	9.25			
	Drain frm Kogilu Mn Rd To Lake								
		2	290.30	0.20	1.50	174.18			
		2	12.00	0.20	1.00	4.80			
	Culvert	10	6.70	0.23	0.45	6.93			
						437.00			
						739.16	**Cum**	**6972.00**	**5153395.63**
5	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	CC Drain Top Covering Slab								
	Oppo. Reva College								
	Road-1	2	115.65	0.90		208.17			
	OM Circle								
	1st Cross Rd	2	95.00	0.90		171.00			
	2nd Cross Rd	2	58.60	0.90		105.48			
	Connecting Road	2	68.70	0.90		123.66			
	Shivapura								
	2nd B Cross Road	1	136.60	0.90		122.94			
	Cross Road 01	1	67.30	0.90		60.57			
	Cross Road 02	1	32.10	0.90		28.89			
	Cross Road 03	1	57.50	0.90		51.75			
						872.46	**Sqm**	**2091.60**	**1824837.34**
6	Providing and Fixing pre cast **covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge ,KPWD SR 2018-19								
	Culvert Top Slab	5	6.70	1.20		40.08			
						40.08	**Sqm**		
		Upto 125%				**18.00**		**5478.00**	**98,604.00**
		Above 125%				**22.08**		**5478.00**	**120954.24**
7	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 8km lead= (I No-19.14,P No-143,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	1	133.00	5.90	0.30	235.41			
	OM Circle								
	1st Cross Rd	1	107.00	5.70	0.30	182.97			
	2nd Cross	1	106.90	5.50	0.30	176.39			
	3rd Cross Road	1	107.00	6.95	0.30	223.10			
	Connecting Road	1	104.00	5.95	0.30	185.64			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15	0.30	558.30			
	CC Road								
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	193.60	5.15	0.30	299.11			
						1860.91	**Cum**	**149.40**	**278019.80**

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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
8	SRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	1	133.00	5.90		784.70			
	OM Circle								
	1st Cross Rd	1	107.00	5.70		609.90			
	2nd Cross	1	106.90	5.50		587.95			
	3rd Cross Road	1	107.00	6.95		743.65			
	Connecting Road	1	104.00	5.95		618.80			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15		1860.99			
	CC Road								
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	193.60	5.15		997.04			
						6203.03	**Sqm**	**9.96**	**61,782.18**
9	Construction of **granular sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications.(I No-20.5,P No-153,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	1	133.00	5.90	0.15	117.71			
	OM Circle								
	1st Cross Rd	1	107.00	5.70	0.15	91.49			
	2nd Cross	1	106.90	5.50	0.15	88.19			
	3rd Cross Road	1	107.00	6.95	0.15	111.55			
	Connecting Road	1	104.00	5.95	0.15	92.82			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15	0.15	279.15			
	CC Road								
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	193.60	5.15	0.15	149.56			
						930.45	**Cum**	**1992.00**	**1853465.36**
10	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	1	133.00	5.90	0.225	176.56			
	OM Circle								
	1st Cross Rd	1	107.00	5.70	0.225	137.23			
	2nd Cross	1	106.90	5.50	0.225	132.29			
	3rd Cross Road	1	107.00	6.95	0.225	167.32			
	Connecting Road	1	104.00	5.95	0.225	139.23			

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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15	0.225	418.72			
						1171.35	**Cum**	**2091.60**	**2449990.95**
11	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6,KPWD SR 2018-19)Issue rate Dated -01-07-2020								
	Oppo. Reva College								
	Road-1	1	133.00	5.90		784.70			
	OM Circle								
	1st Cross Rd	1	107.00	5.70		609.90			
	2nd Cross	1	106.90	5.50		587.95			
	3rd Cross Road	1	107.00	6.95		743.65			
	Connecting Road	1	104.00	5.95		618.80			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15		1860.99			
						5205.99	**Sqm**	**19.92**	**103703.32**
12	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7,KPWD SR 2018-19)Issue rate Dated -01-07-2020								
	Oppo. Reva College								
	Road-1	1	133.00	5.90		784.70			
	OM Circle								
	1st Cross Rd	1	107.00	5.70		609.90			
	2nd Cross	1	106.90	5.50		587.95			
	3rd Cross Road	1	107.00	6.95		743.65			
	Connecting Road	1	104.00	5.95		618.80			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15		1860.99			
						5205.99	**Sqm**	**19.92**	**103703.32**
13	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6,KPWD SR 2018-19) Issue rate Dated -01-07-2020								
	Oppo. Reva College								
	Road-1	1	133.00	5.90	0.05	39.24			
	OM Circle								
	1st Cross Rd	1	107.00	5.70	0.05	30.50			
	2nd Cross	1	106.90	5.50	0.05	29.40			
	3rd Cross Road	1	107.00	6.95	0.05	37.18			
	Connecting Road	1	104.00	5.95	0.05	30.94			

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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15	0.05	93.05			
						260.30	**Cum**	**7968.00**	**2074066.42**
14	Providing and laying **bituminous concrete** 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) (P.No-171,I No-21.78.12,KPWD SR 2018-19) Issue rate Dated -01-07-2020								
	Oppo. Reva College								
	Road-1	1	133.00	5.90	0.04	31.39			
	OM Circle								
	1st Cross Rd	1	107.00	5.70	0.04	24.40			
	2nd Cross	1	106.90	5.50	0.04	23.52			
	3rd Cross Road	1	107.00	6.95	0.04	29.75			
	Connecting Road	1	104.00	5.95	0.04	24.75			
	Rd frm Hajbhavan to Vidhana Soudha Layout	1	302.60	6.15	0.04	74.44			
						208.24	**Cum**	**9960.00**	**2074066.42**
15	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15,KPWD SR 2018-19)								
	Oppo. Reva College								
	Road-1	2	133.00	0.10		26.60			
	OM Circle								
	1st Cross Rd	2	107.00	0.10		21.40			
	2nd Cross	2	106.90	0.10		21.38			
	3rd Cross Road	2	107.00	0.10		21.40			
	Connecting Road	2	104.00	0.10		20.80			
	Rd frm Hajbhavan to Vidhana Soudha Layout	2	302.60	0.10		60.52			
						172.10	**Sqm**	**498.00**	**85,705.80**
E1	KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size & with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. specification.								
	Basic Rate	2429.00							
	6% AW	145.74							
	Sub Total	2574.74							
	4.98% TP Above	128.22							
	Total	**2702.96**							
	Drain frm Kogilu Mn Rd To Lake	1	302.30	3.00	0.23	208.59			
						208.59	**Cum**	**2702.96**	**563802.75**

Executive Engineer
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Yelahanka Zone
BBMP, Bangalore-92

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Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
cement concrete pavement Construction of un-reinforced plain cement concrete pavement, Thickness as per design, over a prepared sub base with 53 grade cement or any other type as per clause 1501.2.2 M30 (Grade) coarse and fine aggregate conforming to IS: 383 maximum size of coarse aggregate not exceeding 25mm , mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weight batcher as per approved mix design laid in approved fixed of 125 micron thick polythene film, wedges steel plates including levelling the form work as per drawing, Spreading the concrete with shovels rackers compacted using needle screed and plate vibrator and finished in a continuous operation including provision of contruction joints primer joint sealant								
Basic Rate	4916.00							
6% AW	294.96							
Sub Total	5210.96							
4.98% TP Above	259.51							
Total	5470.47							
CC Road								
Rd frm Hajbhavan to Vidhana Soudha Layout	1	193.60	5.15	0.15	149.56			
					149.56	Cum	5470.47	818140.98
							Total Construction Cost	26378290.33
							Utility Shifting,Miscellaneous and Rounding off	238.67
							GRAND TOTAL	26378529.00

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer,
BBMP Bangalore

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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BBMP, Bangalore-92

Technical Sanction
Accord... Rs 26378,529.00
Head of A/C 3801 ... 25.3.2021
CER NO :... 9.0 ... Dt:...

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